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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,721	08/13/2003	Shan-Wen Chang	112.P77290	1720

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BERKELEY LAW & TECHNOLOGY GROUP, LLP
17933 NW Evergreen Parkway, Suite 250
BEAVERTON, OR 97006

EXAMINER

MISLEH, JUSTIN P

ART UNIT	PAPER NUMBER
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2622

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06/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/604,721	Applicant(s) CHANG ET AL.	
	Examiner Justin P. Misleh	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 - 15 is/are allowed.
- 6) ☒ Claim(s) 1 - 10, 16, 17, and 19 - 23 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

NOTE: The Examiner for the present application has changed.

Response to Arguments

1. Applicant's arguments with respect to Claims 1 and 16 have been considered but are moot in view of the new grounds of rejection.

Specification

2. The substitute specification filed March 6, 2007 has not been entered because it does not conform to 37 CFR 1.125(b) and (c) because it is not accompanied by a statement that the substitute specification includes no new matter. See MPEP §608.01(q) [R-3].

Terminal Disclaimer

3. The terminal disclaimer filed on March 6, 2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US 6,741,809 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Objections

4. **Claims 1 and 22** are objected to because of the following informalities: lack of clarity and precision.

For **Claim 1**, “the laser-framing viewfinder” is recited when only “a laser viewfinder” is recited. For the purposes of clarity, the former should be changed to the latter. **Appropriate correction is required.**

For **Claim 22**, “the means for sliding” is recited when no “means for sliding” has been previously recited. For the purposes of clarity, “the” will be interpreted as “a”. **Appropriate correction is required.**

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1 – 10 and 16, 17, and 19 – 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunte et al. (US 5,821,523) in view of Correa et al. (US 6,340,114 B1).

Independent Claim 1 appears to fully encompass independent Claim 16 and corresponding dependent Claim 17, Claim 22, and Claim 23. Accordingly, they will be rejected together.

7. For **Claims 1, 16, 17, 22, and 23**, Bunte et al. disclose, as shown in figures 1, 2, 6a, and 6b, an image capturing apparatus comprising:

a housing (401):

an illumination source (614; see column 14, lines 3 – 17) at the housing (401) capable of generating light;

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a first lens (diffusing lens 656) at housing (401) capable of diverging the light (see column 14, lines 3 – 17);

a camera lens (611) at the housing (401) capable of capturing an object in the laser-framing viewfinder (see column 12, lines 45 – 50);

an optical viewfinder (106/406) capable of receiving light to view the object being image captured (see column 5, lines 31 – 35; column 11, lines 17 – 31).

Bunte et al. do not disclose A) a second lens at the housing, the second lens set capable of moving relative to the housing and being aligned with the optical viewfinder and B) wherein the illumination source is a laser beam and a mask capable of masking the laser beam diverged by the first lens to form a laser viewfinder.

In regards to item A), **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of providing a lens set in an optical viewfinder that is capable of moving relative to the housing and being aligned with the optical viewfinder are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have providing a lens set in an optical viewfinder capable of moving relative to the housing and being aligned with the optical viewfinder for the advantage of focusing an object through the viewfinder, thereby providing an accurate view of the object to be captured.

In regards to item B), Correa et al. also provide an image capturing apparatus for reading codes. More specifically, Correa et al. teach an image capturing apparatus with a laser-framing viewfinder (see figures 4 and 11), the image capturing apparatus comprising a laser source (laser diode 212) installed inside the housing (laser diode 212 is inside laser beam generator 30, which can be found inside chassis member 26, see figures 1 and 2) for generating a laser beam (projects

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a beam of light; see figure 12) and a framing mask (diffractive optical element 202) for masking the laser beam diverged by the first lens to form a laser-framing viewfinder (multiple beamlets are produced by the diffractive optical element, see column 12, lines 58 – 60). Therefore, Correa et al. disclose wherein the illumination source is a laser beam and a mask capable of masking the laser beam diverged by the first lens to form a laser viewfinder, as claimed.

At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included wherein the illumination source is a laser beam and a mask capable of masking the laser beam diverged by the first lens to form a laser viewfinder (as taught by Correa et al.) in the image capturing apparatus (disclosed by Bunte et al.) for the advantage of increasing the reliability, versatility and target working range of such systems (see Correa et al., column 2, lines 25 – 29).

8. As for **Claims 2 and 20**, Bunte et al. disclose, as shown in figures 1, 2, 6a, and 6b, further comprising a reflector (412) on the housing capable of reflecting the light generated from the illumination source (see column 14, lines 17 – 31).

As stated above, the combined teachings of Bunte et al. in view of Correa et al. show that it would have been obvious to one with ordinary skill in the art to made the illumination source a laser beam.

9. As for **Claim 3**, Bunte et al. disclose, as shown in figures 1, 2, 6a, and 6b, wherein the reflector (412) comprises a plane mirror (654) capable of being adjusted on the housing (reflector unit 412 retracts and pivots; see column 14, lines 17 – 31; see column 11, line 41 – column 12, line 13).

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10. As for **Claim 4**, Bunte et al. disclose, as shown in figures 1, 2, 6a, and 6b, wherein the housing (401) comprises a main body (401) and a sliding set (items 614, 414, 616, 610, 611, and 612 are considered to be “a sliding set”) on the main body, and the illumination source (614) and the first lens (diffusing lens 656) are on the main body (401) and the sliding set (items 614, 414, 616, 610, 611, and 612 are considered to be “a sliding set”) respectively.

Applicant’s claim is written broadly enough such that the “sliding set” is simply described as having the first lens on it. Accordingly, items 614, 414, 616, 610, 611, and 612 have the first lens on it; therefore, they are the “sliding set”, as claimed.

As stated above, the combined teachings of Bunte et al. in view of Correa et al. show that it would have been obvious to one with ordinary skill in the art to made the illumination source a laser beam.

11. As for **Claims 5 and 21**, while not specifically shown in figure 6A, it is necessary for Bunte et al. to provide two optical viewfinder ports on the housing (401) capable of receiving light to view the object being image captured according to the operation of the viewfinder described in column 5 (lines 31 – 35) and column 11 (lines 17 – 31).

12. As for **Claim 6**, Bunte et al. do not disclose a second lens at the housing, the second lens set capable of moving relative to the housing and being aligned with the optical viewfinder.

However, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of providing a lens set in an optical viewfinder that is capable of moving relative to the housing and being aligned with the optical viewfinder are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have providing a lens set in an optical viewfinder capable of moving relative to the

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housing and being aligned with the optical viewfinder for the advantage of focusing an object through the viewfinder, thereby providing an accurate view of the object to be captured.

13. As for **Claim 7**, as indicated above, Bunte et al. do not disclose a second lens at the housing, the second lens set capable of moving relative to the housing and being aligned with the optical viewfinder. However, also as indicated above, the concepts and advantages of providing a lens set in an optical viewfinder that is capable of moving relative to the housing and being aligned with the optical viewfinder are well known and expected in the art.

The Examiner additionally believes, under Official Notice (MPEP § 2144.03), that both the concepts and advantages of further including an optical viewfinder with a lens set having a plano-concave lens and a convexo-concave lens are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included an optical viewfinder with a lens set having a plano-concave lens and a convexo-concave lens for the advantage of *producing little aberrations thereby increasing the accuracy of the object being imaged*.

14. As for **Claims 8 and 19**, Correa et al. teach wherein the framing mask comprises shading material (see column 12, lines 53 – 62, the aiming portion is interpreted to contain the “shading material” around the outside of the desired image capture area in order to focus the light on the desired target; also see the aiming pattern generated in column 13, lines 44 – 64 and figure 11).

15. As for **Claim 9**, Bunte et al. disclose, as shown in figures 1, 2, 6a, and 6b, further comprising a connecting port (wireless port) capable of outputting image data (see figure 3).

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16. As for **Claim 10**, Bunte et al. disclose, as shown in figure 3, wherein the connecting port is a WAN or cellular radio (see column 8, lines 54 – 67); however, does not disclose wherein the connecting port conforms to the USB or the IEEE 1394 standards.

Official Notice (MPEP § 2144.03) is taken that both the concepts and advantages of providing a connecting port conforms to the USB or the IEEE 1394 standards are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included a connecting port conforms to the USB or the IEEE 1394 standards for the advantage of providing *a port A) with hot-swappable functionality (USB) and B) that can communicate with any other node at any time, subject to network conditions (IEEE 1394).*

Allowable Subject Matter

17. **Claims 11 – 15** are allowed and **Claim 18** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

18. The following is a statement of reasons for the indication of allowable subject matter:

The closest prior art teaches an imaging apparatus which is capable of illuminating the targeted area with a laser beam. The imaging apparatus described in the art has a housing, which contains a laser beam generator, a lens for diverging the beam, a framing mask for masking the projected beam in order to form an illumination area, a lens for capturing the image, and a plane mirror reflector for reflecting the generated beam. The housing is broken down into different pieces, which contain the described parts above. There are also two windows in the front of the

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imaging apparatus that are used as viewfinders. The imaging apparatus can be connected to other devices that conform to specified standards via a connecting port in order to output the imaging information.

The closest prior art does not teach or fairly suggest where there is a section of the main body that can slide up and down in the camera, having the following effects. When it is positioned inside the housing the laser-framing viewfinder will be active, the power of the laser generator will be switched on and the user will only be able to use the laser-framing viewfinder when capturing an image (in this configuration you can not use the optical viewfinder). When the section is slid upward the optical viewfinder will be active, the power of the laser generator will be switched off and the user will only be able to use the optical viewfinder when capturing an image (in this configuration you can not use the laser-framing viewfinder).

Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

20. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lin Ye can be reached on 571.272.7372. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM
June 22, 2007



VIVEK SRIVASTAVA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600